

CLAIMS

1. Shear for cutting especially heavy steel plate to length with an upper blade (3), which carries out a rolling cutting movement by means of an eccentric drive (8) and is held in a blade holder (1), and with a lower blade (4), which is mounted in a stationary way in the shear frame (2), wherein the upper blade holder (1) is movably connected by an articulated guide element (5) with a shear frame column (6) present on the shear, and a device for the timed advance of predeterminable lengths of the steel plate, especially in the form of at least one driver, is assigned to the shear, characterized by the fact that the shear is arranged between lateral columns (6, 6') of a shear frame (2) with a closed construction with one upper cross-frame (7) and one lower cross-frame (7'), such that the eccentric drives (8, 8') of the upper blade (3) are installed in the upper region of the shear frame (2), and in the lower region of the shear frame (2), bearings (10, 10') and drive mechanisms

(11) of the lower driver rolls (12, 12') are installed, and a lower blade table (9) is rigidly mounted between the columns (6, 6'), and that the lower blade table (9) is assigned a lower gearbox (15), which has a central bearing (16) in addition to the bearings (10, 10') of the lower driver rolls (12, 12').

2. Shear in accordance with Claim 1, characterized by the fact that one driver with an upper driver contact roll (13) is present before the upper blade (3) and one driver with an upper driver contact roll (14) is present after the upper blade (3) (Figure 4, Figure 6).

3. Shear in accordance with Claim 1 or Claim 2, characterized by the fact that the driver contact roll (29) is assigned a guide rail (17) with an adjustment drive (30), which allows adjustment of the roll bearing for the purpose of adaptation to the width of a partial plate.

4. Shear in accordance with one or more of Claims 1 to 3, characterized by the fact that the run-in driver (13), which is located before the blades (3, 4), is arranged at the shortest distance from them in such a way that the longest possible conveyance with the run-in driver (13) is obtained.

5. Shear in accordance with one or more of Claims 1 to 4, characterized by the fact that the rear driver is designed and arranged in such a way that it holds the partial plates during the cutting apart in addition to the hold-downs to avoid an angular displacement.

6. Shear in accordance with one or more of Claims 1 to 5, characterized by the fact that the contact roll (13) of the run-in driver is arranged on a lever system (20), which transmits a conveyance contact force to the lower driving roll by means of a hydraulic cylinder (21).

7. Shear in accordance with one or more of Claims 1 to 6, characterized by the fact that the rear driver has a driven lower driving roll (14), which is supported on a bracket (22) and at the same time acts as a roller table roller.

8. Shear in accordance with one or more of Claims 1 to 7, characterized by the fact that the lower blade table (9) and the bottom faceplate (24) are mounted between the shear columns (6, 6') in such a way that the cutting forces are introduced directly into the shear columns (6, 6'), so that there is a direct flow of force.

9. Shear in accordance with one or more of Claims 1 to 8, characterized by the fact that an adjustable contact roll (29) is connected with an adjustment drive (30), is preferably guided on a slide with rollers, and can be adjusted to the specific partial plate width by an electric geared motor with rack and pinion, and that the contact roll (29) can be set down on the partial plate by means of a hydraulic cylinder, and during the conveyance of the plate, the slide is hydraulically clamped with the contact roll.